

Content Curation: a new form of gatewatching for social media?

Katarina Stanoevska-Slabeva^{1,2}, Vittoria Sacco¹, Marco Giardina^{1,3}

¹Academy of Journalism and Media, Faculty of Economic Sciences, University of Neuchâtel, Neuchâtel, Switzerland,

²University of St. Gallen, Switzerland

³Sensiel Research, Bern, Switzerland

{[katarina.stanoevska](mailto:katarina.stanoevska@unine.ch), [vittoria.sacco](mailto:vittoria.sacco@unine.ch), [marco.giardina](mailto:marco.giardina@unine.ch)}@unine.ch

Katarina Stanoevska-Slabeva

AJM Professor

Journalism and New Media

Office E 221

Emile-Argand 11, 2009 Neuchâtel, Switzerland

+41 32 718 14 74

katarina.stanoevska@unine.ch

Vittoria Sacco

Research Assistant

Office E 223

Emile-Argand 11, 2009 Neuchâtel

+41 32 718 15 60

vittoria.sacco@unine.ch

Marco Giardina

Research Assistant

Office E 223

Emile-Argand 11, 2009 Neuchâtel

+41 32 718 15 06

marco.giardina@unine.ch

Content Curation: A first step towards gatewatching journalism?

Abstract

The increasingly active role of audiences in news creation is changing the traditional roles between media and journalists and their readers. New concepts on how the role of journalists in relation to an active audience is, will or has to change have been researched. One concept suggested by scholars is gatewatching, which is considered to replace traditional gatekeeping journalistic roles. A new, innovative practice of news reporting is social media curation involving crafting digital narratives out of online and social media content. By considering the concept of gatewatching as theoretical foundation, the characteristics of the process of social media curation are explored based on analysis of resulting stories. Randomly selected curated news stories about the Middle East revolutions extracted from the platform *Storify*'s have been examined by applying content analysis on authorship, original contributors and digital sources. Empirical findings confirm that core gatewatching attributes can be observed in news creation based on social media curation. Examples of extracted gatewatching attributes are the selection and filtering of relevant online and social media information sources and provisioning of direct access to original sources referenced in the stories. However, in addition to professional social media search and filtering of available sources, traditional journalistic skills are still necessary in order to glue the curated pieces of information to a story.

KEYWORDS: Gatewatching, Gatekeeping, Social media curation, *Storify*.

Introduction

During the last decade, Internet has enabled new phenomena by which the audiences get more involved in news production and distribution, challenging thus the role of media organizations and journalism (Bruns, 2003; Bowman & Willis, 2003, Neuberger, 2008). Terms like ‘citizen’ and ‘participatory’ journalism are used to denote these changes. Enabled by technological improvements and by a broad accessibility to content creation technologies as well as to online platforms for content creation, sharing and managing, new forms of citizen and participatory journalism (for example blogs, wikis and social media) have been evolving in recent years. At the same time the amount of new information sources and content, in particular user generated content, has been considerably increasing. These new sources of information together with the growing participation of readers in the new media ecosystem have challenged the role of journalists in the news creation process (Moyo 2009, Newman 2010, 2011).

Several researchers have provided ideas and concepts for a new media ecosystem involving intermediary roles of journalists (Bruns, 2003; Bowman & Willis, 2003, Neuberger, 2008). Bruns (2003, 2008a) has suggested that gatewatching will replace traditional gatekeeping journalistic roles (Shoemaker, Eichholz, Kim, & Wrigley, 2001). Given the limited physical space of conventional media (for example in terms of newspaper pages or television airtime) (Bruns 2003), gatekeeping refers to the important role of journalists to select “...whether or not to admit a particular news story to pass through the “gates” of a news medium into the news channel” McQuail (1994, p. 213). On the contrary, Internet and New Media don’t have space limitation and have enabled audiences to play an active role in the process of news creation, selection and publishing (Bruns 2003). Users are taking over the

role of gatekeeping from media and decide themselves what is newsworthy to them. They watch various existing first-hand information providers, i.e. gates with the aim to identify important and relevant information (Bruns 2003). This active, and in many cases collaborative participation of users in the news selection and creation process is one essential characteristics of gatewatching (Bruns 2003). Gatewatching is compared to gatekeeping furthermore, less focused on drafting own stories based on summary of input from external sources, but rather on the observation, selection and aggregation of already published material in different form.

Bruns has investigated and described the main characteristics of various gatewatching approaches emerging during time on the Internet (Bruns 2003, 2009). These forms of gatewatching differ to the extent to which participation in gatewatching is open to the users of these sites, and the degree to which contributions by individual gatewatchers are distinguished from one another (Bruns 2003, 2009).

Recently, media and journalists are challenged by the developments in social media such as Twitter and Facebook (see for example Newman 2011). Compared with earlier forms of user-generated content, social media support and involve user generated information in form of atomized information (for example Twitter tweets or Facebook updates) provided by many users. They have developed to a new gate, which is used by media and users, in particular eyewitnesses for breaking news (Jarvis 2008; Newman 2009, 2011). However, reporting in social media often lacks a clear storyline which calls for the need to have someone to make sense out of the flow of information, to find the best content and to give credit to the right sources. New social media curation platforms enabling story creation based on social media have thus aroused.

Social media curation is based on the basic concept of media curation proposed by Rosembaum (2011) and deals with large corpora of content from diverse sources and connotes the activities of identifying, selecting, verifying, organizing, describing, maintaining,

and preserving existing artifacts as well as integrating them into a holistic resource (Rotman, Procita, Hansen, Parr, & Preece, 2011). Given this characteristics, curation of social media has on the first glance similar features as gatewatching: it is open to user participation and it is based on observation and curation or aggregation of content from social media. Even though popular blogs and opinion leaders have pointed out to curation as a major trend in the next few years (for an overview see Liu 2010) and despite of its growing importance, there is little research yet, which concentrates on social media curation. While the investigation of the impact of social media on news creation as a first-hand information source has increasingly been subject of research (see for example Moyo, Newman 2009, 2011), social media curation has not been considered in sufficient manner yet. Given this, the paper at hand provides a contribution to fill this research gap by exploring social media curation under the following perspective:

- What are the main characteristics of social media curation?
- To what extent can social media curation be characterized as gatewatching?

In order to answer the research questions social media curation is explored based on content analysis of resulting curated stories. The analysis indeed reveals that social media curation can be considered as a new form of gatewatching, which is pursued by journalists and users in parallel. However, the extent of gatewatching differs. While the gatewatching for journalists is mainly focused on the first and third stage of the news creation process, the users cover all three stages of the process.

The content of the paper is structured as follows: First the concepts of gatekeeping and gatewatching as well as social media curation are introduced. Then, the research design and methodology is explained, followed by the discussion of the empirical results. The paper concludes by placing findings in the broader ecosystem of participatory news gathering and publishing.

Literature review

During the last year, scholars have examined the changing role of media as gatekeepers since users can be their own gatekeepers, by producing and selecting what content to consume (Bowman & Willis, 2003). It is in these circumstances that the new concept of gatewatching has emerged, competing with the old principal of gatekeeping. In this section, firstly the literature review on gatekeeping and gatewatching will be presented. Then, the new concept of social media curation will be explained before it is empirically explored in the next section.

Gatekeeping

Gatekeeping refers to the traditional role of journalists to select and narrate events. It has been defined by Shoemaker, Eichholz, Kim, & Wrigley (2001, p. 233) as “... *the process by which the vast array of potential news messages are winnowed, shaped and prodded into those few that are actually transmitted by the news media.*” Shoemaker et al. (2001) have also underlined that gatekeeping goes beyond the simple story selection. In essence, gatekeeping is the practice of deciding why one story is selected to be reported and the other is not (Bruns, 2006, p. 12, Fig. 1). The gatekeeping process (see Table 2) involves three stages the input, output and response stage (Bruns 2005, 2009) (see also Table 1):

Table 1 – *The three stages of the gatekeeping process according to Bruns (2003)*

| Stages | Gatewatching | Input | Output | Response |
|----------------------------------|--------------|--|----------------------------|--|
| Gatekeeping (Bruns, 2005, p. 12) | - | News-gathering only by staff journalists | Closed editorial hierarchy | Editorial selection of letters/calls to be made public |

- At the input stage, journalists themselves chose news stories to be covered. They narrate stories by combining input from various sources with background and context information. The information is synthesized from multiple sources into one coherent news report, which is published as a product itself and which does not necessarily disclose the original sources of information.
- At the output stage, editors make the final decision and select from journalists' material stories to be reported and published.
- At the response stage, a restrict number of audiences' responses are selected to be incorporated in the day's paper or in the on-air broadcast.

The first works on gatekeeping theory belong to White (1950) who has explored the private reasons given by a newspaper editor for discarding possible news issues. They were followed by studies focused on televisions' newsrooms (D. Berkowitz, 1990; Harmon, 1989) and on websites (Beard & Olsen, 1999; Singer, 2001). Researchers have demonstrated that organizational factors and routines have more impact than gatekeeper journalists on what the public perceives (Beam, 1990; Reese & Ballinger, 2001; Shoemaker, et al., 2001).

Gatekeeping can be influenced by several factors. It seems that events are more likely to pass through the media gates if they are consistent with an expectancy (Singer, 1998; Snider, 1967; White, 1950), if they concur within the time frame of publication (Singer, 1998) and if they are unpredicted stories (Singer, 1998). Similarly, values of both gatekeepers and their audience can influence stories' choice (Beard & Olsen, 1999; DeFleur, 1966; Singer, 1998). If an event or issue passes through the gate once, it is likely that it will pass through the gate again (Singer, 1998). In daily coverage, some issues or events are collected purely because they diverge from others (Singer, 1998). Additional variables that can affect gatekeepers' choices are expert judgment and motivation (D. A. Berkowitz, 1997), political

ideology (Chang & Lee, 1992), education and other background experiences (Peterson, 1979), class position and career pressures (Gans, 1979).

Some evidence shows that journalists view the gatekeeping role as changing and adjusting rather than vanishing. Media newsrooms are adapting their characterization of gatekeepers to include concepts of both quality control and sense-making (Singer, 1997). In his book *The Power of News*, Schudson (1995) appeals readers to envisage a world in which everyone has the ability to distribute news to everyone else through a computer. He has imagined an ecosystem in which everyone can be his or her own journalist. He has advocated that individuals would be rapidly lost to figure out which sources are relevant and accurate. Someone will be needed to sort out the legitimate information. Moreover, in order to find the best content, audience would prefer to be helped by trusted and impartial sources such as media organizations than other sources. Hence, the world imagined by Schudson is not so far from the recent reality, questioning the traditional role of gatekeeper-journalists.

Gatewatching

While gatekeeping was born due to the scarcity of conventional media, gatewatching reflects the changes and new possibilities for audiences to participate in the news generation process enabled by Internet and new media. Internet is not limited in terms of space and everybody can publish any topic. At the same time users are empowered to search and publish information themselves. Media organizations are not the only gatekeepers any more (Bruns, 2006). Bruns (2003, 2006, 2009) has introduced the concept of gatewatching to denote the new, audience driven news selection and creation. According to Bruns (2003), it reflects the new active role of audiences in all three stages of the news creation and gatekeeping process:

Table 2 – Comparison of the gatekeeping and gatewatching process according to Bruns (2003)

| Stages | Gatewatching | Input | Output | Response |
|---|--|--|--|--|
| Gatekeeping (Bruns, 2005, p. 12) | - | Newsgathering only by staff journalists | Closed editorial hierarchy | Editorial selection of letters/calls to be made public |
| Citizen Journalism (Bruns, 2008a, p. 79) | Gatewatching of news sources open to all users | Submission of gatewatched stories to all users | Instant publishing or collaborative editing of stories | Discussion and commentary open to all users. |

- In the first stage instead of journalists, users chose themselves from the available information sources online in a pull-manner what is newsworthy to them. As there is no limit to what and how it can be published, sources and existing gates are open and freely available for everybody to consider. The topics and stories chosen by the users might not match the ones chosen by media. On the contrary, often users concentrate on topics that have not passed the media gates. The role of users as newsgatherers “.... is less similar to that of traditional journalist than it is to that of the specialist librarian, who constantly surveys what information becomes available in a variety of media and serves as a guide to the most relevant sources when approached by information seekers.” (Bruns, 2003).
- In the second stage the editorial hierarchy involved in the final choice of stories to publish is enhanced with or replaced by different forms of user involvement. The

extent to which users are involved in the final choice of news varies. The one extreme in the spectrum of user involvement is the form where users are completely independent and free to decide themselves what to publish as authors. Closed to this form is also the collaborative selection of news organized completely by users without involvement of media organizations. The other extreme are the various forms of involvement of the users in a structured and formalized way in the editorial hierarchy. According to (Bruns, 2003) “... *in their work the staff of many new online news operations combine aspects of the roles of both gatekeeping-journalists and specialist librarians to arrive at a practice which can usefully be termed gatewatching.*” In the middle of the spectrum between the two extremes are various forms of gatewatching that involve more or less democratic combination of both extreme forms.

- Finally in the third stage the story is shaped and finalized by user comments, discussions and ratings, while at the same time sources considered and the process remain transparent.

Through the process of gatewatching a news story becomes a living organism that is born out of existing information sources through the interest of users, than created and shaped first into an initial published form and further developed and enriched through rating, comments and discussions as long as there are users interested in it.

Bruns has analyzed and compared the characteristics of various gatewatching approaches emerging on the Internet (Bruns 2003, 2009) and has identified the following types of gatewatching: closed collaborative sites, open news sites, communal blogs, personal blogs, resource centre sites as well as automated gatewatching. The approaches differ in the openness towards users and have different organization regarding users' participation. To a considerable extent the possibilities of the collaborative gatewatching processes are also delimited by the platforms that users need in order to pursue gatewatching. For example, if

and in what forms user comments are allowed depends also on the available functionality of the underlying platform.

How the users get involved can be illustrated in more detail on the published research from Bruns regarding blogs: Bruns (2003, 2008a) has developed some case studies on blogs according to a number of attributes, principally the degree of involvement of users in the gatewatching process and the level of uniqueness of contributions by individual gatewatchers. He has concluded that some blogs are free from gatekeeping process. All users can contribute in the story creation and all submitted content is distributed instantaneously, leaving the community to assess the accuracy and importance of news immediately after publication (i.e. *Indymedia*, Bruns, 2003, 2006, 2009). Others comprise a quasi-democratic open editorial phase, permitting members to preview, comment, and vote on submitted stories before they are made accessible to all users of the site (i.e. *Kuro5hin & Plastic*, Bruns, 2006). At the same time, there are blogs that are open for participation at the input stage but which preserve a close editorial process where a small group of site operators filter out the least desirable stories before publication (i.e. *Slashdot* as form of supervised gatewatching in Bruns, 2005, p. 40; 2006). Others blogs use Pro-Am elements that merge gatewatcher story submissions with oversights by professional editors (i.e. *OhmyNews*, Bruns, 2008a).

Based on the above findings the main characteristics of gatewatching can be summarized as follows (Bruns, 2003, 2008b):

- Gatewatching is a collaborative engagement either among users or between journalists and news users in different firm in all three stages of the publishing process;
- It relies less on first-hand investigative research and the ability to compose succinct news stories, and more on information search and retrieval skills especially in online environments; The news are not reported first-hand but are curated from official and

other information sources. Thus, gatewatching is rather publicizing news rather than producing news (Bruns 2003);

- Gatewatching is based on a constant watch at the gates, and points out those gates to the readers, which are most likely to open onto useful sources;
- The sources are made transparent and accessible for users. As a consequence, misinformation and bias in the original sources will be passed through to the reader;
- The public is an active reader by taking some of the roles of traditional gatekeepers, such as the assessment of sources and misinformation bias moderated by gatewatchers' comments;
- The process of gatewatching tends to impose few or no limits on the ability of users to become contributors at the response stage.

Main functions and features of social media curation

Recently, media and journalists are challenged by the developments in social media. Social media such as Twitter and Facebook are platforms, which support on the one hand the recording and management of users' relationships and on the other hand the creation and sharing of user generated content (Stanoievska-Slabeva, 2008). Compared with earlier forms of user generated content, social media have lowered the barriers for citizen contributions. While blogs still require some writing talent and time, social media networks allow real-time reporting based on chunks of information provided by their users. Jarvis considers social media contributions to be a new form of citizen journalism – the eyewitness journalism (Jarvis, 2008). Social media have developed to a new gate, which is used by media and users, in particular eyewitnesses for breaking news (Jarvis 2008; Newman 2009, 2011). But, eyewitness journalism in social media has several disadvantages:

- the sheer amount of information provided is overwhelming;

- information pushed forward by new contributions vanishes from readers' screens¹;
- several sources talk about the same events but from different perspectives and on various platforms.

Eyewitness journalism in social media often lacks a clear storyline which calls for the need to have someone to make sense out of the flow of information, to find the best content and to give credit to the right sources and at the same time to preserve unique information provided through social media. New social media curation platforms enabling story creation based on social media have thus aroused.

Social media curation is based on the basic concept of media curation proposed by Rosembaum (2011) and deals with large corpora of content from diverse sources and connotes the activities of identifying, selecting, verifying, organizing, describing, maintaining, and preserving existing artifacts as well as integrating them into a holistic resource (Rotman, Procita, Hansen, Parr, & Preece, 2011; Liu 2010).

Curation and curators are not new phenomena. The role of a content curator can be best explained by comparing it to the classical role of curators - for example museum curators (Rosembaum, 2011). Usually, the curator is a content specialist responsible for the collection of an institution. He is involved in the interpretation of heritage material. As responsible for the collection, he has the duty to preserve but also to enhance its value and to share its content to the public. On the Web, the curator has almost the same tasks. In particular, the curation of professional and social media content, such as aggregating, selecting, organizing (Rotman, et al., 2011), and presenting news according to the criteria for high quality journalism from professional and user generated content, results in new types of editorial content and experience for users. Content curators *locate, organize, and distribute links to relevant, high-*

¹ For example only 3200 tweets are stored per Twitter user.

quality content online, voluntary assuming a quality filtering role that traditional publishers one held (Lowry, 2010, p. 3). Even though curation is already extensively discussed in social media and in the blogosphere (see the overview in Liu, 2010), currently, curation is a rather new and just emerging topic among media professionals and researchers. However, it is clear that it is already changing the media landscape. There are new platforms emerging that enable curation from social media and publishing of curated content (see for example (Fincham 2011), (Atasoy and Martens, 2011)). These platforms, differ but have several common characteristics: they support on the one hand watching of social media and other gates and the creation of curated stories based on the combination of own contribution and selected original sources. As a result even a new form of content is emerging that we denote as curated social media content.

Social media curation has been used for creating different genres as for example curated books (i.e. the book and the e-book *Quakebook* are a collection of tweets, narrating the memories and feedbacks of the earthquakes in Japan and its aftermath or curated videos (Hiratsuka, M., & Walker, B. 2011)). The paper at hand focuses on social media curation in the context of news creation. The result of social media curation are curated news containing selected original contributions from social media that are *glued* together to craft stories with context and background information provided by the curator, i.e. the author of the story. The following definition for curated social media content will be applied throughout the paper: Curated social media content is an innovative content genre that consists of original contributions from both online sites of media outlets and social media such as tweets from microblogs, posts from social networks and videos from video sharing platforms. The selected original cintributions are glued together to a story with background and context information provided by the curator (author). An example of the social media content format is provided in Figure 1. From a structural point of view, main components of curated stories are:

- The original contributions curated from social and/or conventional media (for example tweets from Twitter, or videos from YouTube). These original sources are provided in the story with a click-through possibility;
- Stories can be enhanced with comments from users;
- The context and background information provided by the author, i.e. curator;
- Additional meta-data as date and time of publication, author as well as information about the success of the story in terms of number of views. The number of provided additional meta-information depends on the tool used to curate and create the story.

Some of the advantages that digital curation enables are the enhancement of the quality of data, authenticity checking, enlightening trustworthiness of data, consenting constant access to data, maximizing the utilization of digital materials through time and adding information about the context and provenance of data (Abbott, 2008).

Curation and curated social media content can be the means by which media outlets and journalists can establish a new important role in the future media ecosystem. According to (Rosenbaum 2011a, Fincham 2011), journalists can create and curate the news by merging traditional reporting with the information transmitted from social media.

Methods and procedures

Research Design and approach

The main research goal of the paper at hand is the explorative analysis of social media curation from the perspective of gatewatching. In order to answer the research question it is necessary to operationalize and concretize the research question in concrete observable aspects of the phenomena under observation. Based on previous research dedicated to analysis of various gatewatching sites from Bruns (2003, 2009), the following operationalization of the

explorative analysis structured along to the three stages of gatewatching and gatekeeping has been developed as basis for the planned research (see Table 3):

Table 3 – *Operationalization of the main research question with subquestions*

| Gatewatching Characteristic | Operationalised subresearch question |
|---|--|
| Stage One the news creation proess | |
| C1 – Involvement of users either on their own or in cooperation with media | SRQ1 – Who is involved in social media curation? |
| C2 – Gatwatching relies on existing information sources and gates | SRQ2 – What sources are used in the social media curation process? |
| C3 – The result of the first stage of the gatewatching process are stories that disclose and allow access to original sources | SRQ3 – Are curated sources used in stories disclosed and accessible to the audience? |
| Stage Two of the news creation process | |
| C4 – Users are involved in the decision which story to publish – either on their own or by involvement in the editorial decision hierarchy. | SRQ4 – Who decides which story passes the publishing gate? |
| C5 – Published stories include traces of the publishing decision process for example in form of user ratings. | SRQ5 – Do curated stories include information about the publishing decision process? |
| C6 - The dynamic of publishing is high. Stories are published instantenously. | SRQ6 – What is the dynamics of stories published? |
| Stage Three of the news creation process | |
| C7 – Published stories are rated, commented and discussed | SRQ7 – How is the story treated after publication? |

As can be observed from the table, some features are rather defined by the gatewatching process and some are observable through the resulting stories. However, due to the transparency of the process, which is an inherent characteristic of gatewatching processes, all process steps live traces in the resulting stories and are typically included in the story. These traces, as for example user ratings or comments, document the user participation. Given this, the decision was taken to base the research mainly on curated stories.

In a next step it was necessary to operationalize the phenomena “social media curated stories” by determining concrete explorable stories that would serve as objects of analysis.

After an initial evaluation of emerging social media curation platforms, the platform Storify and resulting Storify curated stories were chosen as bases for the planned research.

Storify was created in September 2010, but was publicly available only from April 2011. Despite of its recent launch, Storify was chosen for the research presented here as there is already a critical mass of stories and it has been already tested and used by media companies. Storify allows watching of social media gates and aggregating of Facebook content, Flickr photos, YouTube videos, Google search, RSS feed and other users' Storify stories. It also supports the process of publishing by enabling users to gather curated contributions into a single story and to add context and/or comments to it (Fincham, 2011). Stories created in Storify can be published either on Storify or they can also be transferred to be published in other platforms. Each author, i.e. Storify user decides to publish a story by himself. However, other users can comment on the story. The structure of Storify stories is illustrated on annex 1, figure 1. The Storify stories differ in terms of the involved context information, the selected original sources and the comments provided by other users. The motives of users creating stories in Storify can vary. In order to assure that stories that can be considered as news are part of the analysis as well as to have high probability to get a sufficient number of stories the overall topic of "Arab Spring" or the recent topic of the Arabic revolution was chosen.

Given that stories have been selected as object of the explorative analysis, content analysis was chosen as a suitable methodology for analyzing the stories.

Content Analysis

Krippendorff (2004, p. 21) have defined content analysis as *a research technique for making replicable and valid inferences from data to their context*. Bernard Berelson defined Content Analysis as *"a research technique for the objective, systematic, and quantitative description of manifest content of communications"* (Berelson, 1974). Content analysis is a research tool focused on the actual content and internal features of media. It is used to determine the presence of certain words, concepts, themes, phrases, characters, or sentences within texts or sets of texts and to quantify this presence in an objective manner. Calculating the frequencies of occurrences for symbols, ideas, references, or topics related to a stream of messages highlights the importance that these symbols, ideas, references or topics have in the message (Krippendorff, 2004).

Studying newspapers' characteristics with content analysis has been used as a common quantitative approach (Boyle, 2008). Content analysis is used in several domains such as inspecting media content, testing hypotheses of message features, evaluating the image of groups in the messages with society, and relating message content with 'the real world' (Wimmer & Dominick, 2006).

Content analysis has been chosen as it has been used when it is hard to structure the material because it has previously been created, such as a newspapers' stories (Krippendorff, 2004). It distinguishes itself by its unobtrusiveness appraisal of communications which values in circumstances where other methods produce bias results, its aptitude to assess the effects of environmental variables and sources characteristics on communication content forms, its acceptance of unstructured material, its capacity to deal with large amount of data and finally, its capacity of giving an empirical starting point for producing new research evidence about the nature and effect of specific messages (Kolbe & Burnett, 1991; Krippendorff, 2004). The assets of content analysis are that it is objective, systematic, and quantitative (Kassarjian, 1977; Kolbe & Burnett, 1991). In content analysis, factors such as *the size of the newspaper*

publishing the material, circulation, the location of the content in the publication, whether it was written by local or national reporters, etc. can be taken into account and can be relevant since they can influence the content (Boyle, 2008, p. 65). Content analysis *embellishes augments, accumulates, and describes information* (Kolbe & Burnett, 1991, p. 248).

To conduct a content analysis on a text, the text is coded, or broken down, into manageable categories of content units with different level of abstraction. A unit of content is defined as an element of content which can be a word, sentence, paragraph, story, image, multimedia or a symbolic meaning (Reese & Whitney, 2004). The content units are coded and analysed using one of content analysis' basic methods: conceptual analysis or relational analysis. Thus, content analysis requires and is based on a specific coding approach that translates the content into quantitative data that can further be analyzed based on quantitative approaches.

Setting up the coding tables

Coding of content is based on a defined code that is developed with reference to the specific research question and goal of the analysis. The code for the research presented in this paper was developed with the goal to provide answers to the sub-research questions presented in Table 3. In particular the following codes were developed:

- Authorship – who was the author of the curated story. This code refers to SRQ1 and SRQ4.
- Publishing dynamics - when was the story published. This code refers to SRQ6
- Sources - what are the sources and how are they presented in the story. This code refers to SRQ2, SRQ3

There were no specific codes for the SRQ4, SRQ5 and SRQ7 as they are answered based on the way how stories are created and published in *Storify*. The curated stories are published by the curator, i.e. author of the story. Thus, the answer to the SRQ4 results out of this feature of the platform and can be further distinguished based on the authorship goal. The same argumentation holds also for SRQ5. Since *Storify* allows comments to each story, also SRQ7 is answered already and does not need additional analysis.

Subsequently, the specific codes are explained in detail:

Authorship: Only registered users can create stories on *Storify*. Each curated story in *Storify* provides the following information about the author: the *Storify* name of the author, the name and surname as well as the country of living of the curator. Media and journalists are either represented through their brand or in case of journalists with a link to the media brand. Given these author information, it was possible to distinguish among authors that are journalists and amateurs. With reference to SRQ1, a code was developed that distinguishes if a story has a journalists or an amateur as author.

Publishing dynamics: In order to determine the dynamics with which the stories were published, the time difference among the date of story publishing and the first original source used in the story was calculated.

Publishing dynamics = Time of story publishing – Time of oldest original contribution used

Three different types of dynamics were distinguished;

- Published within hours (instant stories), which means the story was published within three hours of the original first contribution;
- published within a day (daily story), which means that the story was published within 24 hours of the oldest curated source used in the story;

- published within several days (several-days stories), which means that the story was published later than 24 hours after the first original source.

Sources and Disclosure of Sources: Since social media curation is an aggregation of social media content, several themes and sources could be found in one particular story. If a specific source has been presented, the coder has coded 1 otherwise he has coded 0.

The sources of the stories were analyzed from two different perspectives: the source creator and the type of digital asset.

The source creator: Since the stories are based on original contributions from different social media, it was possible to trace back the original source and to analyze the profile of the creator of the source used. For example, an original tweet that was used in a curated story leads to the Tweeter account of the tweet creator. *Based on previous research* (Xigen et al (2002), Semetko & Valkenburg (2000) and Dimitrova, et al. (2004)), the following coding table for source creators was developed (see table :

Table 4 – *Coding table for source creators*

| Source | Definition |
|------------------|--|
| Media | All level of media professionals involved in media organizations without country distinction. |
| Citizens | Eyewitnesses, victims, prisoners, fighters, protesters and their families from the country of revolutions. |
| Official sources | Official and administration authorities (i.e. members of governments or military forces). |
| O.N.G. | Non-profit organizations (i.e. Amnesty International or the Red Cross). |
| Non-Arab People | People not physically involved in the rebellions and that do not live in Arab countries. |
| Arab People | Arab people, expatriates and refugees that do not live in the countries of the rebellion stories. |
| Themselves | Social media posts of the writers themselves. |
| Other Categories | Sources not identified or that could not be part of the other categories. |

Except for the journalists, for whom the verification of their identity was possible with the information on the official media companies' web sites, for all other social media accounts it has been not possible to verify with certainty their identity. So, faith was given faith to what was written on the social media account of the account owner. As an example, if one writes that he is Syrian in the coding process we assume that he comes from Syria.

The focus of the second analysis of the sources was dedicated to the type of digital asset. Social media curated stories are based on various original contributions: Twitter tweets, YouTube videos, Facebook posts, RSS, Flickr photos as well as other forms of social media contributions. The goal of the analysis of types of digital assets was to understand if amateurs and media professionals prefer one particular channel as source of information. For example, it could be possible that media professionals privileged RSS from their own organizations or other media organizations consider them reliable information or that they rather favor channels that can present information in different ways such as text, photos or multimedia, thus using different social media platforms for finding their information sources.

Summary of the research Design

To summarize, the research presented in the paper at hand, was structured as follows:

- The explorative analysis social media curation is based on social media curated stories and follows the sub-questions presented in Table 3;
- *Storify* was chosen as the appropriate source of social media curated stories;
- Given the specific characteristics of *Storify*, the sub-research questions can directly be answered, while the analysis concentrates on SRQ1, SRQ2, SRQ3 and SRQ6;
- In order to focus on news, stories related to the Arab Spring were selected

- To analyze the features of social media curated stories, content analysis was considered as appropriate research methodology. Coding tables have been developed for the following content elements: authors, dynamics of publishing and sources.

Results

Sample

Since stories cannot be searched directly on *Storify* at the time of the study, search engine was used to select stories. The following key words have been used in *Google search*: *revolution, rebellion, freedom, flag, fight* and *civil war* followed by the name of the chosen country. The name of the cities or places of major events and the name of the dictators have been also used. The search resulted in a random sample of 450 selected *Storify* stories reporting on the Arab Spring. Maybe due to the difficulty of Internet access, the newness of the platforms and the selection restricted to stories written in English, some countries have had a little coverage on *Storify* stories. The sample includes Yemen (43), Syria (74), Bahrain (74), Libya (96), Egypt (96) revolutions and stories, gathering more than one specific country's revolution (66). The chosen stories cover the period from December 2010, when the uprisings started, to the end of August 2011, when the analysis was completed. Since the most important actions took place from January to March 2011, this period of time has been estimated as the most relevant phase of the rebellions, with the most intensive coverage at the time of the study.

All 450 randomly selected stories were coded according to the developed codes. The collected data was analyzed with the statistical software R². Summary data was created for each variable together with cross tabulated data on combination of variables.

Reliability of the sample

² <http://www.r-project.org/>

In content analysis methodology, weaknesses are effects of researchers' biases which can affect selection, examination and explanation of data and limit the giving of detailed foundations of communication which make difficult to path to theoretical perspectives. Interjudge reliability is usually related to standard measures for assessing research quality and credibility of the findings (Kolbe & Burnett, 1991). It allows evaluating the ability to repeat again the analysis, expecting certain results.

As suggested by Riffe & Freitag (1997), ten percent of the sample has been randomly selected and used to measure the intercoder reliability. Since only one researcher has coded the entire sample, another colleague was trained for coding the shared ten percent.

Krippendorff's α has been chosen as reliability index because it can be used for several metrics, for any number of values per variable (α is independent of this number), for any kind of sample size and for sample containing missing values (Krippendorff, 2004). One can rely on variables with reliabilities above α equal to 0.8 (Krippendorff, 2004). Variables with α between 0.667 and 0.8 are considered reliable only for drawing tentative conclusions (Krippendorff, 2004). High levels of disagreement among judges reveal weaknesses in research methods (Kolbe & Burnett, 1991).

Krippendorff's α measuring intercoder reliability of sources attributes has been equal to 0.82 which means that 82% agreement is what can be expected by chance. Digital assets reliability index has been calculated with α normal and has been equal to 0.956 which can be considered acceptable.

Empirical results

Three different characteristics have been considered: authorship, original contributors and digital assets. In this section, the related findings will be presented and the potential role of social media curation embracing gatewatching process will be debated.

Empirical results concerning Authors

As an answer of SRQ1, the content analysis reveals that 52% of the stories are written by media professionals and 48% by amateurs. Thus, as social media content curation is open to everybody, curation enables pluralism of authors and stories. Curated stories have been written not only by media professionals but also by amateurs, demonstrating that gatekeepers are no longer just journalists. As predicted by Bruns (2003), the end-user has an active role, similar to the one of traditional gatekeeper-journalists themselves. Since stories are crafted by media professionals and amateurs, the users become as defined by Bruns (2010): *producers*. Contrariwise to traditional media, social media curation has all the potentials allowing the audience to be involved in both creation and reception of news. For stories written by media professionals, journalists still choose what to keep or omit, so that the professionals remain the guardians of what content is to be distributed. By filtering and picking out what social media or traditional media content is to be distributed, the gatekeeper role is preserved. Therefore, curators are involved in a quasi-journalistic research, covering and enriching news distribution.

Empirical results concerning Dynamics of publishing

First, 42% of the sources used to craft stories were few hours old; this shows that original contributions in social media are curated almost in real time, answering to SRQ6. Social media curation has sped up the decision-making cycle to news production and distribution.

Normally, most of the stories are instant news showing “*the speed of news reporting increases since new stories can be posted as soon as source information is found anywhere on the Net, without a need to wait for journalists to file their stories or gatekeepers to complete their evaluation*” (Bruns, 2003, p. 8). Second, 28% of the stories cover a daily coverage and finally, the remaining 30% cover several days. The amateurs seem to prefer reporting hourly news coverage, giving the most important information (54% of the breaking news coverage are from amateurs). Contrariwise and maybe more traditionally, media professionals choose a multi-day coverage, summarizing the facts and giving a deeper insight into the events (e.g. 57% of several days’ coverage stories are from media professionals).

Empirical results concerning Sources

As already mentioned, the sources have been analyzed from two perspectives: the original creators and the type of digital assets used.

Original Creators: The analysis revealed that most of the stories include several original sources to information curated from social media. The curated parts of the story typically contain a link of the original sources of information (see Table 5).

Table 5 – *Use of original contributors according to time coverage*

| Original contributors | Hours (%) | Day (%) | Days (%) |
|------------------------------|------------------|----------------|-----------------|
| Media | 77 | 87 | 80 |
| Citizens | 55 | 48 | 59 |
| Non-Arab People | 40 | 39 | 51 |
| Arab People | 35 | 36 | 27 |
| Themselves | 25 | 25 | 26 |
| O.N.G. | 13 | 12 | 23 |
| Offical sources | 8 | 6 | 8 |
| Other categories | 15 | 13 | 16 |

Major sources are *media organizations*³, *citizens*, *official sources*, *O.N.G.s*, *non-Arab people*, *Arab people*, *authors themselves* and *unknown sources* (see Table 5), answering SRQ2. Longer coverage stories use more sources. Moreover, the lack of responsibility to editorial norms when certain sources create content facilitate them to be involved in the news with a greater freedom of expression and over a longer time, which is not yet possible for media professionals. There is a growing willingness of the audience to participate in the news production and distribution, due to the high participation of non-media sources. Thus, sources of the social media curated stories are open to all users as the first stage of gatewatching (see Table 2). Instead if stories are written by amateurs, social media curated stories are gatewatching in the first stage and in the second stage.

Digital Sources

Curation consists in aggregating text, photos, multimedia and hyperlinks from several sources which are likely informative, since readers could directly discern the source contributions (see Table 6).

Table 6 – *Use of digital assets according to time coverage*

| Digital Sources | Hours (%) | Day (%) | Days (%) | Sum |
|------------------|-----------|---------|----------|-----|
| Twitter | 37 | 37 | 26 | 100 |
| Twitpic | 29 | 24 | 47 | 100 |
| Facebook | 15 | 51 | 34 | 100 |
| Facebook Photos | 33 | 0 | 67 | 100 |
| RSS | 19 | 30 | 51 | 100 |
| Flicker | 24 | 19 | 57 | 100 |
| You Tube | 17 | 20 | 63 | 100 |
| Yfrog | 36 | 25 | 39 | 100 |
| Lockers | 35 | 23 | 42 | 100 |
| Other categories | 30 | 23 | 47 | 100 |

³ The percentages are presented in order of coverage (i.e. hourly, daily and several days' coverage). The sum does not give 100% since each story has several components (RSS, tweets etc.). Thus, we have assumed that each story is composed by several sources and we have coded them as dummy variables (i.e. if there are present or absent).

In the hourly coverage, storytellers privilege collection and aggregation of tweets, focusing on ongoing actions. Overall 37% of tweets are used in hourly coverage stories. In the several days coverage, photos and videos are predominant (42% of Lockers photos, 47% of Twitpic, 57% of Flickr photos, 67% of Facebook photos and 63% of YouTube video are used).

As Bruns (2003) has argued with respect to gatewatching, this confirms that also the social media curation newsgathering process becomes more transparent as readers are more likely to consult original sources. The verification of sources is left to the reader across hyperlinks and social media accounts but it can be also moderated by the comments of the curators (authors) as it was suggested by SRQ3.

The uniqueness of social media curation is the power of stories to be informative since readers can discover direct and entire source materials. Furthermore, they can quickly access news delivery since new stories can be published as soon as source information is found anywhere on the Web. In addition to this, the news collection and selection become more transparent and readers are stimulated to inspect identity of sources and thus bias will have a diminished influence as readers are more likely to refer to original sources. Moreover, curators seem to need broad online research skills rather than substantial journalistic skills which are all characteristics of gatewatching claimed by Bruns (2003). And finally, as for gatewatching, social media curation rests on the curators' awareness of what news topics might concern their audience (Bruns, 2008b). In its essence, social media curation is easy to use. It enables fast creations of new stories or updates of old ones using a multitude of accessible sources and linking to credentials. It gives context and relevance to social media content where several sources and points of view might be represented and it can give an overview of events discussed on social media networks.

Discussion of results

Is Social Media Curation Gatewatching?

In summary, results reveal that curation glues existing social media content and traditional media content without creating original news itself. Social media curation can be used for fact checking and grassroots reporting. It can convey and control the flow of information awareness, enabling gathering and diffusion of social media breaking news. Social media curation comprises several sources, while at the same time posting one's own story as the primary source of information. Social media curation gives access to internal and external sources in ways that are unique and add enough value to attract news users.

At the current stage, both amateurs' and media professionals' stories present the primary gatewatching characteristic – news sources open to all users. Our empirical findings confirm that curated stories are gatewatching in the first and third stage and in all stages if written by amateurs (see Table 7).

Table 7 – *Stages of Gatekeeping, Gatewatching and Storify*

| Stages | | Gatewatching | Input | Output | Response |
|---|--|--|--|--|--|
| Gatekeeping (Bruns, 2005, p. 12) | | - | News gathering only by staff journalists | Closed editorial hierarchy | Editorial selection of letters/calls to be made public |
| Citizen Journalism (Bruns, 2008a, p. 79) | | Gatewatching of news sources open to all users | Submission of gatewatched stories to all users | Instant publishing or collaborative editing of stories | Discussion and commentary open to all users. |
| Amateurs | | Gatewatching as primary source open to all users | Submission of gatewatched stories to all users | Instant publishing | Users can comments or discuss stories directly on <i>Storify</i> . |
| Storify's stories | | | | | |

| | | | | | |
|--|------------------------------------|--|--|--|--|
| | Media Professionals authors | Gatewatching as primary source open to all users | Submission of gatewatched stories to all users | Story selection controlled by media editors. | Users can comments or discuss stories directly on <i>Storify</i> . |
|--|------------------------------------|--|--|--|--|

Social media curation could be a first attempt to combine approach of gatewatching which supplements automatic newsgathering with human generated content. In addition to professional social media search and filtering of available sources, traditional journalistic skills are still necessary in order to glue the curated pieces of information to a story. Curators have to be trained in the assessment of stories and the curation of information. Media professionals using these tools can benefit from their expertise and organizational resources for adding value and thus making a significant contribution

Curation shows the extent of what Moyo (2009, p. 14) has defined the citizen journalism, which provides effectiveness *in keeping the information flows going even if it means as a mix of truths, half-truths, and untruths when the mainstream media take long to verify and send out information to the public* or when media are banned from the country where uprisings take place. Curation can be the solution for journalists to embrace the role expected by Barodel and Deuze (2001, p. 101) as the one *who serves as a node in a complex environment between technology and society, between news and analysis, between annotation and selection, between orientation and investigation.*

Limitation and Further Researches

Since only one vector of reporting breaking news coverage has been chosen rather than comparing different media curated platforms and different events covered by these platforms, it might be difficult to generalize these findings to the overall phenomenon of social media curation. Indeed, this study is a starting point for other researches that investigate the same conflicts, the use of social media curation and the changing in journalism due to social media and social media curation.

Further researches will explore how to integrate social media content curation in newsrooms and how to teach it to news generation of journalists for careers in the digital sphere. Studies have to explore how to effectively improve these technologies to fit with journalistic policies and understand social practices that support them.

References

- Abbott, D. (2008). What is Digital Curation? *Digital Curation Centre*.
- Bardoel, J., & Deuze, M. (2001). 'Network Journalism': Converging Competencies of Old and New Media Professionals. *Australian Journalism Review*, 23(3), 91-103.
- Beam, R. A. (1990). *Journalism professionalism as an organizational-level concept*: Association for Education in Journalism and Mass Communication.
- Beard, F., & Olsen, R. L. (1999). Webmasters as mass media gatekeepers: a qualitative exploratory study. *Internet Research*, 9(3), 200-211.
- Berkowitz, D. (1990). Refining the gatekeeping metaphor for local television news.
- Berkowitz, D. A. (1997). *Social meanings of news: A text-reader*: Sage Publications, Inc.
- Bowman, S., & Willis, C. (2003). We media: How audiences are shaping the future of news and information.
- Boyle, K. D. (2008). *Transforming the news: The impact of leadership and organizational factors on the adoption and use of interactive elements on newspaper web sites*. Texas Tech University.
- Bruns, A. (2003). Gatewatching, not gatekeeping: Collaborative online news. *Media International Australia Incorporating Culture and Policy: quarterly journal of media research and resources*, 107, 31-44.
- Bruns, A. (2005). *Gatewatching: Collaborative online news production* (Vol. 26): Peter Lang Pub Inc.
- Bruns, A. (2006). Wikinews: The Next Generation of Online News? *Scan Journal*, 3(1).
- Bruns, A. (2008a). *Blogs, Wikipedia, Second Life, and beyond: From production to produsage* (Vol. 45): Peter Lang Pub Inc.
- Bruns, A. (2008b). News blogs and citizen journalism: new directions for e-journalism. *E-Journalism: New Directions in Electronic News Media*. New Delhi: BR Publishing, 2.
- Bruns, A. (2009). Gatekeeping, Gatewatching, Real-Time Feedback: New Challenges for Journalism.
- Bruns, A. (2009) Vom Gatekeeping zum Gatewatching : Modelle der journalistischen Vermittlung im Internet. In Neuberger, Christoph, Nuernbergk, Christian, & Rischke, Melanie (Eds.) *Journalismus im Internet : Profession - Partizipation - Technisierung*. VS-Verlag für Sozialwissenschaften, Wiesbaden, Germany, pp. 107-128.
- Bruns, A. (2010). News produsage in a pro-am mediasphere: why citizen journalism matters. *News Online: transformations and continuities*. London: Palgrave Macmillan.
- Chang, T. K., & Lee, J. W. (1992). Factors affecting gatekeepers' selection of foreign news: A national survey of newspaper editors. *Journalism Quarterly*, 69, 554-554.
- DeFleur, M. L. (1966). Theories of Mass Communication.
- Fincham, K. (2011). Review: Storify (2011). *Journal of Media Literacy Education*, 3(1), 56-60.
- Gans, H. J. (1979). *Deciding what's news: a study of CBS evening news, NBC nightly news, Newsweek, and Time*: Northwestern Univ Pr.
- Harmon, M. D. (1989). Mr. Gates goes electronic: The what and why questions in local TV news. *Journalism Quarterly*, 66(4), 857-863.
- Jarvis, J. (2008). In Mumbai, witnesses are writing the news. *Guardian*
- Kassarjian, H. H. (1977). Content analysis in consumer research. *Journal of consumer research*, 8-18.

- Kolbe, R. H., & Burnett, M. S. (1991). Content-analysis research: An examination of applications with directives for improving research reliability and objectivity. *Journal of consumer research*, 243-250.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*: Sage Publications, Inc.
- Liu, S. B. (2010). Trends in Distributed Curatorial Technology to Manage Data Deluge in a Networked World. *Upgrade: The European Journal for the Informatics Professional*, 11(4), 18-24.
- Lowry, C. (2010). Content Curators and Twitter. *Communications*.
- McQuail, D. (1994). *Mass Communication Theory: An Introduction*, 3rd Edition Sage London.
- Moyo, D. (2009). Citizen Journalism and the Parallel Market of Information in Zimbabwe's 2008 Election. *Journalism Studies*, 10(4), 551-567.
- Neuberger, C. (2008). Internet und Journalismusforschung. Theoretische Neujustierung und Forschungsagenda. *Journalismus online-Partizipation oder Profession?*, 17-42.
- Peterson, S. (1979). Foreign News Gatekeepers and Criteria of Newsworthiness. *Journalism Quarterly*, 56(1), 116-125.
- Reese, S. D., & Ballinger, J. (2001). The roots of a sociology of news: Remembering Mr. Gates and social control in the newsroom. *Journalism and Mass Communication Quarterly*, 78(4), 641-658.
- Reese, S. D., & Whitney, C. (2004). News coverage of US war with Iraq: A comparison of the New York Times, the Arab News, and the Middle East Times.
- Riffe, D., & Freitag, A. (1997). A content analysis of content analyses: Twenty-five years of Journalism Quarterly. *Journalism and Mass Communication Quarterly*, 74, 515-524.
- Rosembaum, S. (2011). Curation nation. How to win in a world where consumers are creators. Why the future of content is context.
- Rotman, D., Procita, K., Hansen, D., Parr, C. S., & Preece, J. (2011). Supporting Content Curation Communities: The Case of the Encyclopedia of Life.
- Schudson, M. (1995). *The Power of News* Cambridge, MA: Harvard University Press. .
- Shoemaker, P. J., Eichholz, M., Kim, E., & Wrigley, B. (2001). Individual and routine forces in gatekeeping. *Journalism Mass Communication Quarterly*, 78(2), 233-246.
- Singer, J. B. (1997). Still Guarding the Gate? *Convergence: The International Journal of Research into New Media Technologies*, 3(1), 72.
- Singer, J. B. (1998). Online journalists: Foundations for research into their changing roles. *Journal of Computer-Mediated Communication*, 4(1).
- Singer, J. B. (2001). The metro wide web: Changes in newspaper's gatekeeping role online. *Journalism and Mass Communication Quarterly*, 78(1), 65-80.
- Snider, P. B. (1967). Mr. Gates" revisited: A 1966 version of the 1949 case study. *Journalism Quarterly*, 44(3), 419-427.
- Stanoevska-Slabeva, K. (2008). Web 2.0–Grundlagen, Auswirkungen und zukünftige Trends. *Meckel, M./Stanoevska-Slabeva, K.(2008, Hrsg.), S, 13-38.*
- Storify.com. (2011) Retrieved November, 23, 2011, from <http://storify.com/>
- Ursell, G. D. M. (2001). Dumbing down or shaping up? *Journalism*, 2(2), 175.
- White, D. M. (1950). The "gate keeper": A study in the selection of news. *Journalism Quarterly*, 27, 383–390.
- Wimmer, R. D., & Dominick, J. R. (2006). *Mass media research: An introduction*: Wadsworth Pub Co.
- Xigen, L., Lindsay, L., & Mogensen, K. (2002). Media in a Crisis Situation Involving National Interest: A Content Analysis of the TV Networks Coverage of The 9/11 Incident during the First Eight Hours. 1-26.

Annex 1

Figure 1 – Example of curated social media content (source: Storify.com, 2011)

Content created by the author

Curated content: picture from Yfrog

Curated content: Tweet

Content created by the author

Curated content: Tweets

Hyperlink on an online journal

Curated content: YouTube video

Author profile

Number of views

Profile of the person who has posted the Tweet

Date and hour when the Tweet has been posted

The Egypt Effect
 Storified by The Stream, February 15, 2011 at 23:56

In Bahrain, Iraq, Yemen and Algeria, citizens are taking to the streets. Here's our wrap of how some of the protests are emerging. (Story published Feb 15, 2011)

In Bahrain, demonstrators are calling for King Sheikh Hamad bin Isa Al-Khalifa to step down. The leader made a rare television appearance today and offered his condolences for the deaths of two protesters killed during police clashes with protesters on Feb. 14.

Profile of the person who has posted the Tweet

Date and hour when the Tweet has been posted

Number of views

Curated content: picture from Yfrog

Curated content: Tweets

Hyperlink on an online journal

Curated content: YouTube video

Author profile

Number of views

Profile of the person who has posted the Tweet

Date and hour when the Tweet has been posted